



Program Evaluation and Research Unit

Veteran Discharge Characterization- Suicide attempts and homelessness

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Prospective Associations of Military Discharge Characterization with Post-active Duty Suicide Attempts and Homelessness: Results from the Study to Assess Risk and Resilience in Servicemembers—Longitudinal Study (STARRS-LS)

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Learning Objectives

By the end of this module, you will be able to do the following:

- Define what is meant by a “bad paper” discharge
- Examine results of surveys as they pertain to suicide and homelessness
- Discuss connection between homelessness and suicide
- Discuss how these findings support our work



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Discharge Characterizations

- Defense Manpower Data Center records “character of service”
 - Honorable, general (under honorable conditions), other than honorable conditions, bad conduct, dishonorable (dismissal for officers), uncharacterized
 - “Bad paper”- other than honorable conditions, bad conduct, dishonorable (dismissal for officers), uncharacterized
 - Article sought to better understand what, if any, connections lie within a “bad paper” discharge and the issues of veteran suicide and homelessness



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2022 Article found in *Military Medicine*

- Research article's goal was to identify risk factors in veteran's suicide and homelessness
- The last two decades have seen an increase in these issues for veterans
- Authors sought to find targeted preventive interventions to help veterans in crisis



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Methods and Data

- STARRS - LS: Study to Assess Risk and Resilience in Servicemembers Longitudinal Study
 - Epidemiological-neurobiological study designed to identify risk and protective factors for suicidal behaviors among U.S. Army soldiers
 - Three baseline surveys- 38,733 surveys
 - 2011-2012 New Soldier Study (NSS)
 - 2011-2013 All Army Study (AAS)
 - 2012-2014 Post Deployment Study (PPDS)



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Screenings

- Suicide attempts were assessed using questions adapted from the Columbia-Suicide Severity Rating Scale
 - Final full sample included 4338 observations
- Homelessness data was collected using modified question from Veteran's Health Administration's Homelessness Screening Clinical Reminder
 - Final full sample included 6837 observations



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Suicide Screening Results

- No association between discharge characterization and suicide attempt were reported by participants
- No respondents, with “bad paper” discharges reported a suicide attempt during observations
- Further research in this issue should be conducted to ensure that findings are consistent and not a factor of circumstance within this study



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Suicide Screening Results

	Suicide attempt sample (<i>n</i> = 4338)											
	NSS				AAS/PPDS				Total			
	Prevalence		<i>(n</i> = 1844)		Prevalence		<i>(n</i> = 2494)		Prevalence		<i>(n</i> = 4338)	
	%	(SE)	RR	(95% CI)	%	(SE)	RR	(95% CI)	%	(SE)	RR	(95% CI)
Suicide attempt predicted risk ^b	–	–	6.3*	(5.0-8.0)	–	–	5.9*	(4.0-8.9)	–	–	6.2*	(4.9-7.9)
Discharge characterization												
Honorable (reference)	1.2	(0.3)	1.0	–	0.9	(0.2)	1.0	–	1.0	(0.1)	1.0	–
General	0.9	(0.5)	0.6	(0.2-1.4)	2.2	(1.0)	1.4	(0.6-3.3)	1.4	(0.5)	0.9	(0.5-1.7)
Uncharacterized	2.2	(0.6)	1.2	(0.7-2.2)	0.0	(0.0)	0.0	–	2.1	(0.6)	1.3	(0.8-2.2)
Bad paper ^c	0.0	(0.0)	0.0	–	0.0	(0.0)	0.0	–	0.0	(0.0)	0.0	–
Missing—RA	0.6	(0.6)	2.2	(0.3-15.9)	0.4	(0.2)	1.5	(0.4-5.4)	0.5	(0.2)	1.8	(0.6-5.4)
Missing—GR	0.9	(0.3)	1.2	(0.6-2.6)	0.0	(0.0)	0.0	–	0.7	(0.2)	1.2	(0.6-2.2)
<i>F</i> _{2,1,2}	–	–	1.8	0.16	–	–	0.7	0.40	–	–	0.8	0.44
Total	1.2	(0.2)			0.8	(0.1)			1.0	(0.1)		



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Homelessness Screening Results

- Risk of homelessness was four times as high among soldiers with “bad paper” discharge as those with an honorable discharge
- Findings were consistent across all facets of study and regardless of time elapsed
- Further research needs to be completed to see if these results are different for male and female veterans



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Homelessness Screening Results

	Homelessness sample (<i>n</i> = 6837)											
	NSS				AAS/PPDS				Total			
	Prevalence		<i>(n</i> = 3344)		Prevalence		<i>(n</i> = 3493)		Prevalence		<i>(n</i> = 6837)	
	%	(SE)	RR	(95% CI)	%	(SE)	RR	(95% CI)	%	(SE)	RR	(95% CI)
Homelessness predicted risk ^b	–	–	4.1 [*]	(3.1-5.4)	–	–	5.1 [*]	(3.4-7.6)	–	–	5.4 [*]	(3.9-7.4)
Discharge characterization												
Honorable	2.9	(0.5)	1.0	–	2.6	(0.4)	1.0	–	2.7	(0.3)	1.0	–
General	7.6	(2.0)	1.5	(0.8-3.1)	7.9	(2.4)	1.1	(0.5-2.4)	7.7	(1.5)	1.4	(0.8-2.3)
Uncharacterized	4.8	(0.9)	1.3	(0.8-2.3)	0.0	(0.0)	0.0	(0.0-0.0)	4.6	(0.9)	1.4	(0.9-2.3)
Bad paper ^c	26.1	(10.9)	4.2 [*]	(2.0-8.6)	17.3	(13.2)	4.8 [*]	(1.3-17.9)	23.9	(8.7)	4.4 [*]	(2.3-8.3)
Missing—RA	1.9	(0.7)	0.8	(0.4-1.5)	1.5	(0.4)	0.7	(0.3-1.3)	1.7	(0.4)	0.7	(0.4-1.1)
Missing—GR	2.0	(0.3)	1.0	(0.6-1.6)	1.4	(0.4)	1.1	(0.5-2.1)	1.9	(0.2)	1.1	(0.8-1.5)
$F_{3,2,3}$	–	–	4.9 [*]	0.003	–	–	2.7	0.07	–	–	11.7 [*]	<0.001
Total	3.2	(0.3)			2.7	(0.3)			2.9	(0.2)		



Veteran Suicide and Homelessness

- Although this article did not find a connection between bad paper discharges and suicide attempts, there is still a connecting between homelessness and suicide attempts
 - *Association between suicide attempts and homelessness in a population-based sample of US veterans and non-veterans, 2019*
 - US adult's lifetime rates of attempted suicide were 5.3 times as much among individuals who had been homeless than individuals who had never been homeless
 - Among US veteran's lifetime rates of suicide attempts were 8.8 times as much among veterans with homeless histories compared with veterans with no homeless histories



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Veteran Suicide and Homelessness

- Mental illness and substance use disorders are among the strongest and most consistent predictors of homelessness among veterans
- These same factors are likely associated with misconduct and other behaviors that may lead to a bad paper discharge



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Veteran Suicide and Homelessness

- Limited to soldiers who completed STARRS during 2011-2014 and then could be tracked and resurveyed in 2016-2019
- Unable to verify suicide attempts and homelessness amongst veterans in the survey
- High percentage of missing discharge documentation in the Guard/Reserve soldiers within NSS



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Discussion

- Since there is a connection between homelessness and suicidal ideations, what can our group do to help?
- What do you think about “bad paper” discharges? Do you feel there is a stigma against those with one?



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References

- Naifeh, J. A., Capaldi, V. F., Chu, C., King, A. J., Koh, K. A., Marx, B. P., Montgomery, A. E., O'Brien, R. W., Sampson, N. A., Stanley, I. H., Tsai, J., Vogt, D., Ursano, R. J., Stein, M. B., & Kessler, R. C. (2022). Prospective associations of military discharge characterization with post-active duty suicide attempts and homelessness: Results from the study to assess risk and resilience in servicemembers—Longitudinal Study (Starrs-LS). *Military Medicine*.
<https://doi.org/10.1093/milmed/usac232>
- Tsai, J., & Cao, X. (2019). Association between suicide attempts and homelessness in a population-based sample of US veterans and non-veterans. *Journal of Epidemiology and Community Health*, 73(4), 346–352.
<https://doi.org/10.1136/jech-2018-211065>



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